

Immune System Assignments

I. The First Lines of Defense - Non-Specific Innate Immunity

	Barrier Defenses	Internal Defenses
Invertebrates		
Vertebrates		

II. The Second Line of Defense – Adaptive Immunity

1. Compare & Contrast B-cells with T-cells based on the following elements

a. Place of formation and place of maturation

b. Antigen receptor structure & antigen recognition mechanism (diagrams OK)

c. Cells produced from **Proliferation**

2. Explain why

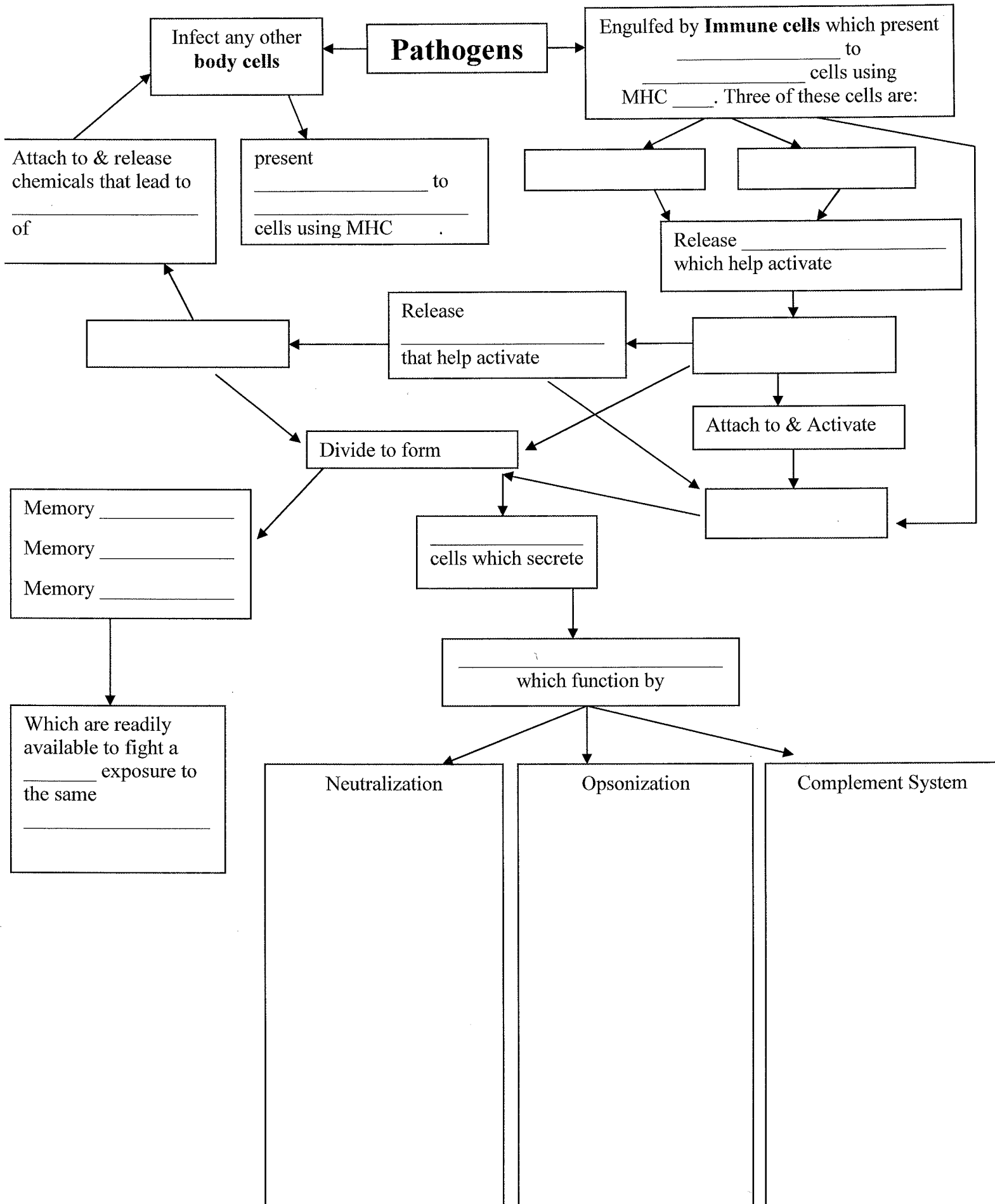
a.) the response to a second exposure to the same pathogen is faster

b.) how a researcher could differentiate between a primary response and a secondary response.

3. Explain the roles of Helper T cells in both types of adaptive immunity.

4. How is HIV able to basically stop the adaptive immune response?

5. Complete the Flow-Chart on the following page which summarizes adaptive immunity.



Plant Defenses

I. Defense Against Herbivores

Physical Defenses

Chemical Defenses

II. Defense Against Internal Pathogens – Bacteria, Fungi & Viruses

Gene-for-Gene Recognition: _____

The Hypersensitive Response – Localized & Specific

Initiated when:

Produces Phytoalexins that:

Produces PR Proteins that:

Stop infection from spreading by:

Before cells die, they produce:

Systemic Acquired Resistance – Widespread & Non-Specific

Signaling molecule from Hypersensitive Response _____ is distributed
to _____ and converted into _____
_____. This signal induces production of _____
which results in _____

